

**AMENDMENT**

**ATTY DOCKET N17-812**

**U.S.SERIAL NO.: 09/730,656**

powdery first filler that scatters at least visible light, said  
powdery first filler being incorporated in a matrix, wherein

*Cmt  
D2* - the coating comprises a second filler which is an absorber  
of radiation of a wavelength in the range of from 800 to 1400 nm,  
and

- the difference between the refractive index of the first  
filler and that of the matrix is at least 0.3.

**REMARKS**

Entry of this Amendment, reconsideration and withdrawal are  
respectfully requested in light of the above amendments and the  
following remarks.

**Summary of the Rejections:**

(1) Claims 1-3 stand rejected under 35 U.S.C. §103(a) as  
allegedly being obvious over Lantz (U.S. 5,258,334).

(2) Claim 4 stands rejected under 35 U.S.C. §103(a) as  
allegedly being obvious in view of Lantz as applied to claim 1, and  
further in view of DiBugnara (U.S. 4,243,427).

(3) Claim 5 stands rejected under 35 U.S.C. §103(a) as  
allegedly being obvious over Lantz and DiBugnara, and further in view  
of Bearinger et al. (U.S. 6,144,106 hereafter "Bearinger").

(4) Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as  
allegedly being obvious over Lantz as applied to claim 1 above, and

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further in view of Gilberg et al. (U.S. 5,053,992 hereafter "Gilberg").

(5) Claim 8 stands rejected under 35 U.S.C. §103(a) as allegedly being obvious over Lantz in view of Gilberg, and further in view of Stafford et al. (U.S. 5,892,661 hereafter "Stafford").

**Applicant's Traversal:**

Claims 1-8 have been amended to overcome all of the claim objections stated in the Final Office Action.

Claim 1 has also been amended to recite that a first side of the substrate is coated with a security coating so as to block visual access to secure data, wherein a first filler scatters at visible light and a second filler scatters light ranging from about 800nm to 1400nm. Applicants respectfully submit that not only does Lantz fail to disclose or suggest, this feature, instant claim 1 would not have been obvious to a person of ordinary skill in the art with knowledge of Lantz.

Applicants respectfully submit that all of the dependent claims are allowable at least for dependence on claim 1, and independent claim 8 is allowable for similar reasons as claim 1.

In addition, the Court of Appeals for the Federal Circuit has also held that:

The mere fact that the prior art  
may be modified in the manner suggested

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by the Examiner does not make the  
modification obvious unless the prior art  
suggested the desirability of the modification.

*In re Fritch*, 973, F.2d 1260,1266, 23 U.S.P.Q. 2d 1780, 1783-84  
(Fed. Cir. 1992). In the present case, the prior art fails to make  
such suggestion.

For all the foregoing reasons, it is respectfully submitted  
that all the present claims are patentable in view of the cited  
references. A Notice of Allowance is respectfully requested.

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Should the Examiner deem that there are any issues which may be best resolved by telephone communication, she is respectfully requested to telephone Applicants' undersigned Attorney at the number listed below.

Respectfully submitted,  
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Date: January 15, 2003

  
By: Steve Cha  
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SG

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Marcel Rene BOHMER et al.  
SERIAL NO.: 09/730,656 EXAMINER: Douglas W. Owens  
FILED : December 6, 2002 ART UNIT: 2811  
FOR: SEMICONDUCTOR DEVICE COMPRISING A SECURITY COATING  
AND SMARTCARD PROVIDED WITH SUCH A DEVICE

VERSION WITH MARKINGS SHOWING CHANGES MADE

Assistant Commissioner for Patents  
BOX AF  
Washington, DC 20231

Dear Sir:

In response to the Office Action dated December 4, 2002, the Applicant requests amendment of the above-identified application as follows:

IN THE CLAIMS:

1. (Three Times Amended) A semiconductor device comprising:  
a substrate; and  
a semiconductor element and at least one security coating provided on a first side of the substrate so as to block visual access to secure data, the at least one security coating including at least two powdery fillers incorporated in a matrix,

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wherein a first powdery filler scatters at least visible light, and a difference between a refractive index of the first powdery filler and that of the matrix is at least 0.3, and the coating comprises a second powdery filler which is a substantial absorber of radiation of wavelengths [at least] in the range of about 800 to 1400 nm and is free of heavy metals.

2. (Twice Amended) A semiconductor device [(20)] as claimed in Claim 1, wherein the second filler comprises TiN.

3. (Twice Amended) A semiconductor device [(20)] as claimed in Claim 1, wherein the first filler comprises TiO<sub>2</sub>.

4. (Twice Amended) A semiconductor device [(20)] as claimed in Claim 1, wherein the matrix of the security coating comprises monoaluminumphosphate.

5. (Twice Amended) A semiconductor device [(20)] as claimed in Claim 1, where the security coating has a thickness of less than 3  $\mu$ m.

6. (Twice Amended) A semiconductor device [(20)] as claimed in Claim 1, [wherein it includes] further comprising a light-

element and an element containing data, [which elements] wherein the light-sensitive element and the element containing data are covered by the security coating [(14)] and [which] wherein the light-sensitive element, after [damaging of] the coating is damaged, reacts to exposure to visible light by inducing a permanent change of state of the element containing data.

7. (Twice Amended) A semiconductor device [(20)] as claimed in Claim 1, [wherein it includes] further comprising a light-sensitive element and an electrically programmable element containing data, [which elements] wherein the light-sensitive element and the element containing data are covered by the security coating [(14)] and [which] the light sensitive element, after [damaging of] the coating is damaged, reacts to exposure to visible light by inducing erasure of the data and by bringing the electrically programmable element into a non-programmable state.

8. (Twice Amended) A smartcard provided with a semiconductor device [(20)] comprising a memory and a security coating [(14)] which comprises a powdery first filler that scatters at least visible light, said powdery first filler being incorporated in a matrix, wherein

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- the coating comprises a second filler which is an absorber of radiation of a wavelength in the range of from 800 to 1400 nm, and

- the difference between the refractive index of the first filler and that of the matrix is at least 0.3.